

Status		Description	Initial Opposition
Motion #			
5	P	Requirement: The MAC must be capable of supporting speeds of 1Gb/s and above	0
7	P	Requirement: The MAC shall support destination removal for uni-cast packets during normal operation.	0
8	P	Requirement: The MAC shall support multi-cast	0
9	P	Requirement: There shall be a mechanism to ensure packets do not circulate forever	0
14	P	The MAC shall allow for 802.17 inter-operability to the level of allowing boxes from different vendors on the same ring	0
26	P	The RPR MAC shall support SONET / SDH physical layers	0
33	P	The MAC shall support a set of operations that enable identification, collection and management of objects related to operation and performance	0
47	P	The 802.17 working group shall define a MAC header and frame format	0
19	P	Require: The MAC shall support multiple types of service	1
23	P	RPR Protection switching shall be complete in less than 50ms for a single failure.	1
24	F	Initial RPR standard shall specify interfaces to existing PHY layers at the time of standardization.	1
34	P	The 802.17 RPR standard shall support a mechanism that allows for topology discovery	1
41	P	The RPR MAC shall preserve the Service Data Unit	1
45	P	The 802.17 RPR Standard shall support and comply with Gigabit Ethernet SAP (Service Access Point)	1
46	P	The 802.17 RPR Standard shall support and comply with 10Gigabit Ethernet SAP (Service Access Point)	1
53	P	The 802.17 RPR Standard should support Operation Administration, Maintenance and Provisioning	1
2	P	Initially the 802.17 RPR Standard shall support a Dual Counter Rotating Ring network topology	3
4	P	The 802.17 RPR Standard shall be capable of supporting speeds of 10Gb/s and above. To support higher speeds some parameters of the standard may be modified	3
15	P	The 802.17 RPR Standard shall support a fully distributed access method without a master node within the same ring.	3
3	P	The 802.17 MAC shall be PHY agnostic	4
20	P	The 802.17 MAC shall be payload agnostic	4
55	P	The 802.17 RPR Standard shall define the managed objects in ASN.1 format.	4
16	F	The 802.17 MAC shall not cause misordering of packets on the ring within a given class except during protection switching events .	5
21	F	The 802.17 MAC should minimize packet loss on the ring during protection switching events.	5

Move	Second	Y	N	A
Gunes Aybay	David James	86	0	4
Perminder Chohan	Khaled Amer	89	1	4
Necdet Uzun	Dan Romascanu	85	0	1
Steve Wood	Nader Vijeh	92	0	0
Dan Romascanu	Pankaj Jha	62	6	10
Hani Fanous	Lauren Schlicht	74	4	9
Constantinos Bassias	Vince Eberhardt	77	0	4
Robin Ollson	Harry Peng	89	0	0
Harmen Van As	Sanjay Agrawal	71	1	4
Nader Vijeh	Gunes Aybay	82	0	5
Gunes Aybay	Raj Sharma	16	54	11
Vince Eberhard	Hani Fanous	60	0	16
Bob Schiff	Raj Sharma	70	6	11
Robin Ollson	Nader Vijeh	60	5	20
Robin Ollson	Nader Vijeh	64	4	17
Ashwin Muranganti	Constantinos Bassias	51	13	19
Khaled Amer	Spencer Dawkins	72	2	4
Yong Kim	Spencer Dawkins	71	5	7
Lars Ramfelt	Raj Sharma	77	2	4
Hani Fanous	Raj Sharma	81	0	1
Pankaj Jha	Harry Peng	78	1	3
Lars Ramfelt	Nader Vijeh	57	10	10
Hani Fanous	Gunes Aybay	49	18	6
Steve Wood	Hani Fanous	23	47	4

	Title: Full interoperability	
	Objective: RPR compliant nodes should be interoperable on a ring	
W	Requirement: 802.17 shall support full interoperability between nodes on a RPR ring.	
31		5
18	F The 802.17 RPR Standard shall provide support for customer traffic separation.	6
61	The fairness mechanism shall support proportional and weighted bandwidth allocation	6
62	The RPR standard shall support a minimum packet size	6
	Title: Independence from higher layers	
	Objective: 802.17 function shall be independent of higher layer protocols	
27	Requirement: 802.17 shall deliver data presented at its MAC service interface independent of higher layer protocol.	7
60	The fairness mechanism shall support unequal bandwidth allocation	7
40	RPR MAC shall support a mechanism for carrier class customer traffic separation independent of the carried protocol	8
25	RPR must support a dynamic node-based BW allocation mechanism.	9
	Title: Domain separation	
	Objective: RPR should support customer separation	
	Requirement: 802.17 shall allow association of a port with a 'domain' . It shall not allow delivery of data from a port associated with one domain to a port associated with another domain.	
29		9
6	Requirement: The MAC must be capable of supporting speeds ranging from 155MBit/s to above 10Gb/s	11
12	Minimal packet loss on ring except during protection events	11
13	No packet loss on ring except during protection events	12
	Objective: In order to make comparisons between access/fairness mechanisms, each proposal to be considered for the 802.17 standard by the working group must reveal MAC structure and algorithm detailed enough that it can be simulated by any member of the WG.	12
37		12
22	RPR MAC defines packet transport only over a ring topology.	13
39	The RPR MAC will permit RPR networks to be designed with minimal bounded delay and jitter, and guaranteed bandwidth	13
52	RPR MAC architecture should be independent of ring span distances	13
	Title: Fair access to ring	
	Objective: RPR traffic should provide fair access for traffic going to the ring	
	Requirement: 802.17 shall define a fairness method for traffic contending for transmission on the ring. Fairness method shall include equal or weighted fairness	14
32		14
	Title: Bridging between rings	
	Objective: 802.17 should support layer 2 ring interconnection between two rings	
28	Requirement: 802.17 shall support native (802.17) MAC bridging between rings.	15

Constantinos Bassias Harry Peng

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42	The RPR MAC shall include an LLC layer to interface to multiple MAC clients	15
57	RPR MAC should support Class based traffic separation.	15
59	RPR MAC should support bounded delay, minimum jitter and guaranteed bandwidth services.	16
35	The 802.17 MAC shall not require the need for a reconciliation layer in interfacing with SONET PHY's to support GFP: support a length field as an option in the MAC to SAP interface.	19
36	The 802.17 MAC shall support performance monitoring on a per customer per class bases in the transit path.	19
48	RPR MAC shall support source redirect in less than 50ms after a fault, as a mechanism for protection	21
11	Requirement: plug and play (a new node must be able to forward packets without explicit configuration)	22
44	The RPR MAC will provide for better than 90% link utilization for any span on the ring	22
51	The fairness mechanism shall prevent upstream and downstream advantage or disadvantage in terms of bandwidth and delay allocation	23
54	Provide flexibility in implementation by the standard being agnostic of the buffering, Scheduling, QoS and Switching architectures. (So Vendors can differentiate in this space)-	23
30	Title: Support sub-OC48 rate Objective: RPR should be capable of operating at sub-OC48 rates Requirement: 802.17 shall be capable of operating at minimum data rate of 55 Mbps (SONET STS1 rate)	24
38	The RPR MAC shall support a means to provide variable protection based on customer SLA	24
49	The RPR MAC shall operate with N+1 rings	29
50	The RPR MAC shall not remove packets in transit due to FCS errors	30
10	Requirement: There must be a mechanism to insure packets do not circulate more than twice	33
56	Should have no packet loss during user initiated protection switching events.	34
43	The RPR MAC will support a cut-through transit buffer on the ring	38
17	Require: No misordering on ring (within a given class) during protection events.	44
58	RPR MAC should support different span bandwidths.	49

